

REMARKS

By the foregoing amendments, claims 7 and 33 have been cancelled and claims 1, 26 and 30 have been amended. Thus, claims 1-6, 8-32 and 34-39 remain in the application.

Claims 1-39 were rejected in the outstanding Office Action under 35 U.S.C. §102(b) as being anticipated by the patent to Quinlan, U.S. Patent No. 4,020,724, as stated on page 2 of the Office Action. This rejection is hereby traversed and reconsideration thereof is respectfully requested in view of the above amendments to the claims and Applicants remarks set forth below.

The present invention is directed to an improved modular/configurable rotary die and a method of producing corrugated carton blanks utilizing the rotary die. As discussed in detail in the application specification, as compared to the prior art, the present invention provides unique flexibility and significant cost savings. A different dedicated die-with its own unique type and/or configuration of blades-need not be created to produce each specific type-carton blank as in the prior art.

As recited in claim 1, as amended, the modular-configurable rotary die for a rotary die cutter for making a corrugated carton blank from a stock sheet of corrugated material comprises a plurality of die components which are interlocked with one another, each die component having at least one blade thereon for at least one of scoring, creasing and cutting a corrugated sheet to cooperatively form a corrugated blank in a rotary die cutter from a stock sheet of corrugated material. See for example page 13 of the specification, Example R1, wherein the die components are described as being interlocked with respect to one another by, for example, using pins on one of adjacent die elements and sockets or holes for receiving the pins on the other adjacent die

element. Further, as described on page 20 of the specification, for example, a finished corrugated carton starts out as a stock sheet of corrugated material of a particular width and length. When a die creases, scores, slots, slits and/or cuts the sheet as described in the specification, the result is a carton blank of a particular type and size. When the carton blank is folded and glued at the manufactured joint, it becomes a knock down flat (KDF), which then can be erected into a carton. A stock sheet of corrugated material, shown at 13 in Fig. 2A, for example is scored, creased and cut to product the carton blank 2 shown in Figure 2A using the modular/configurable rotary die of the invention as described on pages 13 and 14.

In contrast to the present invention, the rotary cutting die of Quinlan is only processing an already formed carton blank 55 which has been previously formed with a plurality of slots 56, folding scores 58 and flaps 59 as described in the patent. The rotary cutting die of Quinlan is only adapted to flap-cut or corner-cut the previously formed, slotted carton blank. The rotary die of Quinlan is not one which forms the carton blank from a stock sheet of corrugated material as in the present invention wherein a plurality of die components cooperate to form a corrugated carton blank in the rotary die cutter from a stock sheet of corrugated material. Further, the individual die components in the rotary cutting die of Quinlan are not interlocked with one another as are the die components of the present invention. This interlocking of individual die components assures accurate position and alignment of the die components with each other as disclosed in the application specification.

Each of the independent claims has been amended to positively recite the aforementioned features of the present invention, namely that the plurality

of die components are interlocked with one another and that the rotary die cutter and method of the invention make a corrugated carton from a stock sheet of corrugated material. The present invention as recited in the claims as amended is not anticipated 35 U.S.C. §102(b) by Quinlan. Accordingly, reconsideration and allowance of the claims as amended is requested.

A Petition for Extension of Time to permit the timely filing of this Amendment is enclosed herewith. Applicants also encloses herewith an Information Disclosure Statement citing an international search report in related international patent application no. PCT/US03/34923 and the references cited therein not already of record in the application.

Please charge any shortage in the fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 01-2135 (Case No. 1011.42224X00) and please credit any excess fees to such deposit account.

Respectfully submitted,



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Attachments